



FY16 Chief of Naval Operations (CNO) Environmental Awards Natural Resources Conservation, Large Installation Naval Air Station Whidbey Island, Oak Harbor, WA

Introduction

NAS Whidbey Island (NAS Whidbey Island) is the premier naval aviation installation in the Pacific Northwest and home of all Navy tactical electronic attack squadrons flying the EA-18G Growler. NAS Whidbey Island is home to Commander, Electronic Attack Wing and Squadrons; Naval Ocean Processing Facility; Commander, Patrol and Reconnaissance Wing 10; and Northwest Regional Naval Intelligence Center. Adding to the depth and capability of the air station are four P-3 Orion Maritime Patrol squadrons and two Fleet Reconnaissance squadrons flying the EP-3E Aries. Starting in late FY16, six P-8A Poseidon squadrons will begin to replace the Orion squadrons.

The Navy's electronic attack aircraft have been single-sited at NAS Whidbey Island since the 1970s. The mission of the Navy's electronic attack aircraft is to suppress enemy air defenses and communications systems. Additionally, Navy electronic attack aircraft disrupt enemy land mines and improvised explosive devices in order to protect the lives of U.S. service members. The Navy was directed to assume the airborne tactical electronic attack mission for all of the DOD. This mission was formerly shared by the Navy, Air Force, and Marine Corps and will now be carried out solely by the Navy with the EA-18G Growler aircraft. Currently, nine carrier squadrons, four expeditionary squadrons, and one training squadron are at NAS Whidbey Island, for a total of 82 operational aircraft.

NAS Whidbey Island is home to 7,870 active duty, 12,960 family members, and 2,196 civilians. NAS Whidbey Island consists of seven geographically separate areas representing 55,729 acres of land and water in Washington's Puget Sound as well as inland and coastal Oregon. The aircraft are based at Ault Field and housing and services are located on the Seaplane Base, both of which are sited near Oak Harbor, Washington. Of the 55,729 acres, 47,342 acres comprise Naval Weapons Systems Training Facility (NWSTF) Boardman, Oregon, which includes air-to-ground ranges, terrestrial impact areas, and special use airspace. Both DON and the Oregon National Guard (ORNG) train at NWSTF Boardman. Boardman also contains three Research Natural Areas (RNAs) established in 1978 which are co-managed by the Nature Conservancy (TNC) through a cooperative agreement. These RNAs were the first established on DoD lands, and TNC's activities include research and monitoring of native habitat types and wildlife species, as well as control of noxious weeds. Additionally, NAS Whidbey Island manages 14.5 miles of shoreline, 1,147 acres of wetlands, and 24.5 miles of streams.

Management of natural resources aboard the installation is guided by the NAS Whidbey Island Integrated Natural Resources Management Plan (INRMP) and the NWSTF Boardman INRMP. Mr. John Phillips is the sole staffer responsible for all natural resources management.

Washington ground squirrel conservation strategy for NWSTF Boardman

The Washington ground squirrel has been a candidate for federal listing since 1999 but was precluded by other higher priority listing actions. On 21 September 2016, the USFWS concluded, in large part because of NAS Whidbey Island's conservation commitments for the species, that the listing of the Washington ground squirrel as a federal threatened or endangered species was not warranted. Since the Navy manages one of the largest remaining habitat blocks for the species in Oregon, NAS Whidbey Island has been working closely with the USFWS since the mid-2000's to develop a conservation strategy for the species that would maintain military training flexibility and reduce the need for federal listing the species. This strategy includes full implementation of the baseline Washington ground squirrel conservation measures in the approved January 2012 version of the NWSTF Boardman Integrated Natural Resources Management Plan and the implementation of the Washington ground squirrel focused conference opinion for military readiness activities at NWSTF Boardman for future training proposals. This agreement was codified by the Navy on 31 March 2016 with the issuance of the Record of Decision for the Final Environmental Impact Statement for Military Readiness Activities at NWTF Boardman, Oregon.

This conservation strategy focusses on developing a new monitoring protocol for Washington ground squirrels in and around training areas, habitat enhancement actions conducted in the parts of the training range that are not used for active training and implementing an adaptive management strategy should unforeseen impacts materialize from future training. The benefit of this strategy is that it supports military training activities by providing a set of predictable requirements that can be implemented and planned for in the future. It also reduces pressure to federally list the Washington ground squirrel to provide a measure of flexibility for support of future military training needs while providing for the conservation of the species. Developing and implementing the conservation strategy included many partners including the US Navy's Pacific Fleet, The Nature Conservancy, Oregon Department of Fish and Wildlife, Oregon State University researchers, and the USFWS.

In FY15 and FY16, the Navy initiated the development of a new monitoring protocol for the Washington ground squirrel including collecting baseline data, began a habitat enhancement study to determine the best enhancement methods to accomplish habitat restoration goals, replanted 6 miles of unneeded firebreak to restore habitat, and treated and replanted more than 400 acres of previously burned and degraded habitat.

This is a very successful working relationship with the Navy's conservation management partners that was best described in the USFWS press release for the listing review. "Concerted efforts by the U.S. Navy, Washington and Oregon fish and wildlife agencies, private landowners, and other partners have been successful at balancing agriculture production, wind energy and military readiness with conservation," said Paul Henson, the Service's Oregon State Supervisor. "This is what can happen when we all work together and another fine example of how the Endangered Species Act can stimulate collaborative conservation and avoid the need for a species to be officially listed."

The Integrated Natural Resources Management Planning process allowed the Navy to develop and implement conservation measures for the Washington ground squirrel while still being able to meet mission-critical military training operation needs.



Washington ground squirrel with radio collar.



Planting forbs for habitat restoration.

Navy support of Morrow County Green Corridor initiative and B2H powerline siting

Morrow County, Oregon and Idaho Power Company have been working to develop a single powerline corridor through the county to facilitate bringing renewable wind power from Idaho and Oregon to the utility grid along the Columbia River. In September 2016, NAS Whidbey Island came to an agreement with Idaho Power Company for a powerline alignment that would occur on the edge of Navy property. This alignment would not degrade military readiness and allow the company to move renewable energy to market. Through a collaborative working effort with BLM, Idaho Power Company and Morrow County, a powerline design was developed that reduced powerline height to avoid impacting training airspace and kept the powerline out of sensitive natural and cultural resource areas. Making this proposal a reality was facilitated by the Washington ground squirrel conservation commitments that were made by NAS Whidbey Island and the flexibility that they provide.

Crescent Creek restoration project adjacent to Crescent Harbor Marsh

Crescent Creek is an incised and straightened creek channel that flows into the Navy's Crescent Harbor Marsh juvenile salmon restoration project. The Crescent Harbor Marsh is a regionally significant juvenile salmonid restoration project in the Skagit River delta that opened up 206 acres of suitable pocket estuary habitat for outmigrating salmon in August 2009. It is considered to be one of the most significant completed restoration actions of its kind in the northern Puget Sound. During the success monitoring for Crescent Harbor Marsh all five salmon species have been documented using the restored site. As part of that monitoring, the Crescent Creek restoration project was identified as an additional beneficial action that could be taken to add additional value to juvenile salmon using the site.

During late spring juvenile coho salmon have been seen congregating at the site where Crescent Creek flows into the marsh. It is believed that the fish are trying to find their way into the creek

to utilize that habitat. Currently there is no defined channel for the fish to enter and they eventually disperse to other areas of the marsh. A full restoration of the creek channel would allow fish access into the freshwater creek. NAS Whidbey Island has been working with local Native American tribes through the Skagit River System Cooperative to restore Crescent Creek back to a natural grade and sinuosity. In FY15 and 16, the Cooperative conducted a site analysis and in April 2016 completed a preliminary restoration design for the project.

These projects were initiated as a conservation measure to support underwater explosive training in Crescent Harbor. Both projects directly support sustaining military training by providing conservation measures to increase the survival of juvenile salmon leaving the Skagit River and compensate for the impacts of EOD training. Upon completion of the creek restoration, there will be an additional 50 acres of available floodplain wetland restoration that can be developed later as mitigation for any future expansion of the airfield that impacts wetlands. This project also highlights the Navy's commitment to restoration of Puget Sound that is part of the President's initiative.

The Crescent Creek and Crescent Harbor marsh restoration projects are a multiple partner endeavor and are considered to be one of the premier examples of north Puget Sound salmon restoration. NAS Whidbey Island is working with the Skagit River System Cooperative, Island County, the Swinomish Tribe, Philip Williams and Associates, and University of Washington researchers. The partnership is built on a common goal of providing more salmon survival in the Skagit River and many different funding sources have facilitated this project, from Navy environmental funding and Seabee labor assets to state/federal Salmon Recovery Funding Board grants.



During FY15, a new breakwater project in Crescent Harbor demolished a 536-foot long derelict pier constructed of creosote-soaked wood (~970 piles and 23,000 sq ft of decking) and replaced it with a 400-foot concrete breakwater.



Demolition of the pier converted 23,000 sq ft of shaded low-quality nearshore habitat into high quality local eelgrass habitat, which is beneficial to juvenile salmonids. The new breakwater used methods and materials that avoided impacts to ESA-listed, MMPA-protected resources, while facilitating nearshore migration of juvenile salmonids.

Feeder bluff bulkhead removal at Maylor Point, Seaplane Base

The Northwest Straits Foundation (NWSF) and Coastal Geologic Services proposed an armor removal bluff restoration project to the Navy in FY15. In the late 1970s the US Army Corps of Engineers undertook a demonstration project to implement a variety of methods to inexpensively protect shoreline from Maylor Point to Forbes Point on the Seaplane Base. The methods included revetments made from used tires and creosote soaked timbers, gabion baskets, and concrete bags. The project was 1,500 feet in length and has failed in its entirety, actually exacerbating erosion. With the cooperation of the Navy, the removal project was designed by Coastal Geologic Services. Benefits include enhanced nearshore habitats, removal of toxic treated wood and other debris, and improved exchange of terrestrial and aquatic nutrients, insects, invertebrates, and organic material. The Navy is working with the NWSF to acquire funding from the Estuary and Salmon Restoration Program, and obtaining permits for the project.



Creosote-soaked timber revetment.



Used tire revetment.

Garry Oak planting and restoration above Building 13 on the Seaplane Base

Garry oak trees and woodlands are a very important local community feature. It is what gives the city of Oak Harbor, which hosts NAS Whidbey Island, its name. The Seaplane Base has the last native habitat grove of Garry Oak trees in the Oak Harbor area which is about 9 acres in size. Maintaining a native stand of oaks in this area requires active management to prevent brush encroachment and to stimulate acorn production. Without fire (which was used by Native Americans), the trees have difficulty regenerating replacement oak seedlings. The installation's landscaping contractor cleared brush and conifers, applied herbicide to retard brush growth and planted 40-50 Garry oak seedlings to jumpstart oak tree recruitment. NAS Whidbey Island has partnered with the Oak Harbor Garry Oak Preservation Society to care for the trees until they are fully established. The Society has provided labor to put protective cages around the seedlings and to water as needed during the dry season. Future actions at the site will include additional brush removal and initiating small controlled burns in the grove.



Installing protective cages around Garry Oak seedlings on the Seaplane Base.



Bald eagle being relocated from airfield in support of NAS Whidbey Island's BASH program.

BASH program support

NAS Whidbey Island natural resources personnel work closely with air operations staff and USDA Wildlife Services personnel as part of the installation BASH working group to develop solutions for resolving emergent wildlife risks on the airfield. NAS Whidbey Island has a successful BASH program that focuses on reducing wildlife habitat values, wildlife harassment and removal of problem animals. A successful example is the bald eagle relocation program. Bald eagles become a risk on the airfield especially during the spring causing airfield use delays impacting the ability of the airfield to fit in all needed mission training requirements. When the program started in 2012, the installation trapped and relocated 20 bald eagles per year. In FY15 and 16 respectively, the NAS Whidbey Island BASH program relocated 5 and zero bald eagles respectively. We believe that this reduction mirrors the reduction of aircraft strike risk on the airfield and is a result of developing different targeted trapping protocols with increased harassment to persuade the birds to forage in other areas.

Hunting program activities

NAS Whidbey Island has a small but very active hunting program. Whidbey Island is mostly private property with few public hunting areas, so the NAS Whidbey Island program provides a valuable outdoor recreation opportunity for both military personnel and the general public. For FY15 and 16, the hunting program averaged about 210 permitted hunters with an additional unquantified number of guests. Activities totaled more than 3000 hunter days in the field and harvested ring-necked pheasant, various waterfowl species, cottontail rabbit and black-tailed deer. In addition to recreation, the deer hunting program on the Ault Field property supports the installation mission and BASH program by helping to remove and/or chase deer from the airfield vicinity. For the upland bird hunting program, NAS Whidbey Island partners closely the Washington Department of Fish and Wildlife which provide state reared pheasants and volunteer staff to operate the release program. Active duty Navy personnel provide volunteer labor to repair and maintain duck blinds and other facilities to keep the program functioning.



Earth Day 2015. Sailors assigned to Fleet Readiness Center Northwest, pick up trash during NAS Whidbey Island's Maylor Point Trail cleanup. NAS Whidbey Island celebrated Earth Day with multiple cleanup events to raise awareness and promote positive environmental practice.



Earth Day 2016. NAS Whidbey Island commanding officer, Captain Geoff Moore, gets a little help while planting a native Sitka Spruce tree on base to commemorate Earth Day.